

EasySPC User Guide

V1.1



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Version: 1.1

This document is intended to guide you through the process of setting up EasySPC.

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Overview

EasySPC provides users with the ability to create SPC charts within Power BI.

A key feature is the ability to create multiple SPC charts in a single visualisation via the Spotlight functionality. The at-a-glance overview enables you to quickly identify issues that may require urgent attention, without having to filter through each chart individually.

Pre-requisites

EasySPC licence

Basic SPC charting functionality is available without a license.

To perform annotations, marking of baselines, shifting control limits and ghosting of data points requires purchasing a license.

Free	Licence
All chart types available	Spotlight functionality
Applying Targets	Annotations
Toggle Sigma 1 and 2 on/off	Marking Baselines
Export to .ppt/.pdf	Shifting Control Limits
Special Cause identification	Ghosting data points
	Upper/Lower Specification Limits
	Capability Analysis (inc. CPK, PPK, DpM)
	JSON Theme Generator

Please contact BCN for more information by visiting https://bcn.co.uk/data-and-ai/easyspc/



Setting up EasySPC

After adding and selecting the EasySPC visual, add the DATE and MEASURE DATA fields (as a minimum) to the visual field well. The below landing page will then be displayed:

Find the perfect SPC chart, step by step	Spotlight Mode See Specia	I Cause across multiple charts	Learn more		
Chart Selection Wizard	RUN CHART	Run Chart +			
S Full Version	ANY PROCESS OR DATA	Kurchart			
None					
+ Starter Version	CONTROL CHARTS				
Run Chart • C Chart • T Chart	COUNT OR CLASSIFICATION A	TTRIBUTE DATA)		CONTINIOUS (VARIABLES DATA)	
• P(v) Chart • G Chart • P~ Chart • U~ Chart • I (X-MR)	Count		Classification	Single observation	Multiple observations
Chart • P(c) Chart • U Chart • XBars Chart	Equal areas of opportunity	Unequal areas of opportunity	Unequal or unequal areas of opportunity	Subgroup size = 1	Equal or unequal subgroup size
Manage licence	C Chart Subgroup < 5000	U Chart Subgroup < 5000	P Chart Subgroup < 5000 +	XmR (I) Chart	XbarS Chart
Learn more about EasySPC Contact us		U' Chart Subgroup > 5000	P' Chart Subgroup > 5000 +		
	Count / classification				
	Time between rare events	Case between rare events			
	T Chart Subgroup < 5000 +	G Chart Subgroup < 5000			
G BCN					

will walk you through the available chart types by selecting the way

the data is presented:

Selecting

EasySPC Chart Selection Wizard		×	ζ
ABOUT YOUR DATA		Suitable charts	
O Attribute Data Counted, not measured. Whole numbers, such as items that passed or failed	• Variable data A measure that requires a scale. Time, money, physical measurement and throughput	xBars	

All chart types are available without a license. Selecting one of them will automatically display the chosen chart type. Please refer to the table below when determining which fields are required:

Chart Tana	Field							
Chart Type	Date/DateTime	Measure Data	Measure Data (n)	Measure Data (Stdev)				
Run Chart			Not required	Not required				
C Chart		Not required	Not required	Not required				
U Chart			Group/Sample Size (Denominator)	Not required				
P Chart	Continuous Date	Value to be	Group/Sample Size (Denominator)	Not required				
X-MR Chart	or DateTime field	(<i>Numerator</i>)	Not required	Not required				
XbarS Chart			Group/Sample Size (Denominator)	Std Dev calculated for Group/Sample				
T Chart			Not required	Not required				
G Chart			Not required	Not required				



Entering Licence Key

There are three ways to add a Licence Key to the EasySPC visual.

If many SPC charts are to be created, it is recommended to use the JSON Theme Generator (available on BCN HUB) to apply the Licence to all generated EasySPC visuals.

Alternatively, the Licence can be entered inside EasySPC by selecting Manage licence from the landing page. The following page will display:

TasySPC Manage L	icence	×
Find the perfect SPC chart, step by step	Enter your licence key	
	Licencee	
✓ Full Version	Licencee	
None		
+ Starter Version	Licence Key	
Run Chart • C Chart • T Chart • P(v) Chart • G Chart • P~ Chart • U~ Chart • I (X-MR) Chart • P(c) Chart • U Chart • XBars Chart	Your licence key	
Manage licence	Save No licence? With a licence you can	
Learn more about EasySPC Contact us	Annotate data points / Mark baselines / Shift your control limits / Automatically shift control limits / Ghost data points / Spotlight / Specification Limits Find out more or call us now on +44 (0)345 095 7000	
S BCN		

After entering, please select the SAVE button before closing the landing page.

It is also possible to add the Licence Key to each visual within the native Power BI visual formatting pane, under CHART SETTINGS.

An easier method is to setup two measures, one for **Licencee** and one for **Licence Key**, both with the required value within quotation marks, e.g. [Licence Key = "XX1234"]. These measures can then be

added to the Conditional Formatting for elements within the Format pane of the visual. This stores the Licence details within the PBIX but would still require adding them to each EasySPC visual.

The Premium Licence offers the ability to utilise the JSON Theme generator, which negates needing to add the Licence to each visual.



Setting up your data for Spotlight

For Spotlight the **Date**, **Measure Data**, **Measure Data** (n) and **Measure Data** (Stdev) fields need to be added to the visual.

Data must be presented within a single 'long' KPI table. For example, you may currently monitor multiple fact tables with a shared dimension within a star schema. Any existing tables should be recreated as the following example shows:



(*) some additional data will need to be created as it does not exist in the source data – in which case a placeholder value is required for the visual to render correctly.

Indicator	Attendance_date	Value	n	stdev	Department
Attendance	01/01/2023	2645	0	0	Cardiology
Admissions	01/01/2023	2633	0	0	Cardiology
Discharges	01/01/2023	2614	0	0	Cardiology
Discharge Rate	01/01/2023	2622	2633	0	Cardiology
Attendance	01/01/2023	1901	0	0	ENT
Admissions	01/01/2023	1843	0	0	ENT
Discharges	01/01/2023	1816	0	0	ENT

Example Data structure:

Create the visual (Spotlight)

Once your data is set up, you can create the EasySPC Spotlight visual.

1	Add licence key You need a valid licence key to use Spotlight. You can add these in the Chart Settings .	Visualizations >> Format visual >> >> >> >> >> >> >> >> >> >> >> >> >>	
	If you are unable to access the chart settings, ensure you have a data field added to the visual such as date.	Chart Settings	



2	Enable Spotlight After you add your licence key the Spotlight Mode toggle will appear at the top of the EasySPC home screen. Toggle this to enable Spotlight. You may need to expand the size of the visual on the canvas or view in Focus Mode.			Spotlight Mode
4	Once you have enabled Spotlight select Save Changes .			Save Changes
3	Select initial chart type Once Spotlight mode is enabled you should select the initial chart type from the formatting pane. The default chart type is C Chart (Control). Note: You can update the chart type for individual groups later once the visual has been created.			Visual General Chart settings Leence fx Leence fx Spotlight Gehaft chart Control Control Ford Diplay Idea in Docimal gloces X-axis scoll Solw K Linit B Solw K Linit B '> Beart to defluid;
5	Add data fields Add a minimum of Date, Measure Data, Measure data (n) and Measure data (Stdev) fields. Continue to add additional data fields to the visual.			Date Date Date Date Sum of Value X Measure Data (stdev) Sum of stdev Sum of stdev V Group By Indicator Department
6	If you haven't yet added your data fields to the visual, you will see a message prompting you to set up your data.			✓ Spatilght mode enabled ✓ Spatilght mode enabled ✓ Spatilght for EasySPC helps work with Special cause aross all charts in your data set, and quicks to reach chart to make changes and ad anotations. Use the each chart to make changes and ad anotations. Eutopating the to make changes and ad anotations. Use the each chart to make changes and ad anotations. Use the each chart to make changes and ad anotations. Use the each chart to make changes and ad anotations. Use the each chart to make changes and ad anotations. Use the each chart to make changes and ad anotations. Use the each chart to make changes and ad anotations. Use the each chart to make changes and ad anotations. Use the each chart to make changes and ad anotations. Use the each chart to make changes and ad anotations. Use the each chart to make changes and ad anotations. Use the each chart to make changes and ad anotations. Use the each chart to make the each to the each
7	Spotlight is now enabled!	Entroyape Instructor Admissions Admissions Admissions Admissions Admissions Admissions Discharter Edito Oncharge	Polizior Store et 2 Departer Contrologi Contrologi EN1 EN1 EN1 EN1 EN1 EN1 EN1	Image: space



Configure the visual

Once Spotlight is enabled and you have created the charts, you can apply various filters to the overview page, as well as navigating around the individual charts.

		Ability to filter the tab	le			Include/Exclude	Special Cause	View individual SPC Chart	
EasySPC	Department Show all	¥	Indicator Show all	¥		Special Cause Show all			٢
Department	1 Indicator	1 Date	1 Value	\$\$ Special Cause	‡ M	DC Variance	CL Baseline	1 Annotation	
All Departments	Admissions	01/04/2024	1014	• 01/12/2021		(1)	1047		∍
All Departments	Attendance	01/04/2024	1123	• 01/04/2024			1118	Issue identified in psychiatry department, currently under investigation	€
All Departments	Discharge	01/04/2024	970			(s)hr)	1029		∍
All Departments	Discharge Rat	te 01/04/2024	970			(s)h#	1029		≥
Burns Unit	Admissions	01/04/2024	151	• 01/12/2022		(s/b)	159	Special cause identified between April22 and December22 - under investigation	≥
Burns Unit	Attendance	01/04/2024	180			(1)	173		∍
Burns Unit	Discharge	01/04/2024	139	0 01/01/2024		(s)(b)	152		∍
Burns Unit	Discharge Rat	te 01/04/2024	139	0 01/01/2024		(s)r)	152		∍
Cardiology	Admissions	01/04/2024	78			(s)(P)	89		∍
Cardiology	Attendance	01/04/2024	89			(s). (s).	97		∍
Cardiology	Discharge	01/04/2024	71	• 01/04/2024		1	85		∍
Cardiology	Discharge Rat	te 01/04/2024	71	• 01/04/2024		~	85		∍
Maternity	Admissions	01/04/2024	110			(s)(r)	111		∍
Maternity	Attendance	01/04/2024	135			(s). ¹ /2	120		∍
Maternity	Discharge	01/04/2024	97	• 01/04/2024		1	106		∍
Maternity	Discharge Rat	te 01/04/2024	97	• 01/04/2024		~	106		≥

Setting the chart type (and other settings) for different groups

As mentioned above, you can update the chart type and other settings for individual groups once the visual has been created.

Simply click on the **Back to Spotlight** button in the top right corner of the overview page to display the Spotlight settings.

From here you can select the group type that you want to set different chart type/formatting for:

SPOTLIGHT SE	TTINGS		
Scorecard columns	Chart level	Actions	
Please select a group by type		KPI	~
		Grouping	
Downloads		KPI	

Please note only one group type can be used across all chart types.

In example above, if 'KPI' is selected, then all Spotlight SPC charts can have their chart type customised based on that metric/field. If 'Grouping' is required also, then a separate Spotlight visual would need to be created.

Select the individual metric/field value you would like to customise the SPC chart for:



POTLIGHT SE	TTINGS			
orecard columns	Chart level	Actions		
ease select a grou	ip by type	KPI		•
Downloads			✓ 🕂	
Downloads			es between i	indicators.
Innovation requests				

Once selected, various settings can be modified. Within 'Chart Settings' is the option to specify the SPC chart type for the chose metric/field value. After configuring the desired settings select 'Save Changes' and return to the visual to check all settings have been applied appropriately.

precard columns	Chart level	Actions
ease select a grou	p by type	KPI 🗸
Downloads		♥ 🕒
stomise settings fo	individual indicator	s. You can copy and paste changes between indicators.
Close S	upport response ti	ime
Close 5	upport response ti	ime
Close S	upport response ti	ime
Close S	upport response ti	ime
Close S Chart setting Axis settings	upport response ti	ine
Close S Chart setting Axis settings	upport response ti S	ine
Close S Chart setting Axis settings Control limit	upport response ti IS S	me
Close S Chart setting Axis settings Control limit Direction of	upport response ti Is s travel	me
Close Close Chart setting Axis settings Control limit Direction of SPC rules	upport response ti Is s travel	me
Close S Chart setting Axis settings Control limit Direction of SPC rules	upport response ti is s travel	me
Close S Chart setting Axis settings Control limit Direction of SPC rules Target line	upport response ti is S travel	me
Close S Chart settings Axis settings Control limit Direction of SPC rules Target line Capability ar	upport response ti is s travel alysis	me

Select the chart type required for each group and click **Save Changes** to be returned to the overview page.

View individual charts

You can drill down to the individual chart allowing further detail analysis.

You can also edit each chart individually, such as marking a baseline, adding a shift and annotations. Annotations added at the individual chart level will display on the Spotlight overview page.

Note: New charts created with Spotlight are not linked to any existing visuals you have created with EasySPC. For example, if you set a baseline or add an annotation to an individual chart within the Spotlight visual, the baseline or annotation would not be available within another visual.

If you need to move existing charts to Spotlight, we advise you use the export facility to get the data and input it once Spotlight has been set up. The same applies to baselines and targets from existing EasySPC charts.

Edit individual chart settings

Open the chart you would like to edit by clicking on the arrow icon from the Spotlight table \supseteq

Click on the quick chart settings icon in the top right corner



From here you can edit the setting for this individual chart, such as the chart type, desired direction of travel and Axis format.

Once you have updated the required settings for the individual chart, click save to apply the changes and return to the chart.

Working with Targets

Spotlight allows you to set targets at an individual chart level or for all charts contained within the Spotlight visual.

Targets can be managed at the individual chart level within the quick chart settings menu, as above.

To enable targets at the Spotlight level, switch the toggle **Target Line Settings** on. Within target source select your *measure*.



Adding additional data items

You can add additional target data item to the visual.

Select **Measure** to add additional data items, which will plot a target line as per the data.

For example, you could create a measure to set a universal target line.

Alternatively, different departments could have specific targets applied to them.

Date	
Jate	\checkmark ×
Measure Data	
Sum of Value	~ ×
Vleasure Data (n)	
Sum of n	$\sim \times$
vleasure Data (Stdev)	
oum of stdev	~ ×
Group By	
ndicator	~ ×
Department	$\checkmark \times$
arget	
arget	~ ×
JSL	
Add data fields here	
.SL	

Example Target data:

Indicator	Date	Value	n	stdev	Department	Target
Attendance	01/04/2022	1391	0	0	Cardiology	1100
Attendance	01/05/2022	2792	0	0	Cardiology	1100
Attendance	01/06/2022	1145	0	0	Cardiology	1100



Sample Data for Spotlight

Indicator	Date	Value	n	stdev	Department
Attendance	01/04/2022	1391	0	0	Cardiology
Attendence	01/05/2022	3703	0	0	Cordiology
Attendance	01/03/2022	2792	0	0	Cardiology
Attendance	01/06/2022	1145	0	0	Cardiology
Attendance	01/07/2022	1331	0	0	Cardiology
Attendance	01/08/2022	2107	0	0	Cardiology
Attendance	01/09/2022	1481	0	0	Cardiology
Attendance	01/10/2022	1265	0	0	Cardiology
Attendance	01/10/2022	1305	0	0	cardiology
Attendance	01/11/2022	2802	0	0	Cardiology
Attendance	01/12/2022	1945	0	0	Cardiology
Attendance	01/01/2023	2645	0	0	Cardiology
Attendance	01/02/2023	1626	0	0	Cardiology
Attendance	01/03/2023	2265	0	0	Cardiology
Attendence	01/03/2023	1203	0	0	Cardialagy
Attendance	01/04/2023	1305	0	0	Cardiology
Attendance	01/05/2023	2168	0	0	Cardiology
Attendance	01/06/2023	2967	0	0	Cardiology
Attendance	01/07/2023	2043	0	0	Cardiology
Attendance	01/04/2022	2987	0	0	ENT
Attendance	01/05/2022	2464	0	0	ENT
Attendence	01/06/2022	1015	0	0	
Attendance	01/00/2022	1815	0	0	ENT
Attendance	01/07/2022	2855	U	U	ENI
Attendance	01/08/2022	1889	0	0	ENT
Attendance	01/09/2022	1124	0	0	ENT
Attendance	01/10/2022	2844	0	0	ENT
Attendance	01/11/2022	1683	0	0	ENT
Attendance	01/12/2022	1262	0	0	FNT
Attenuance	01/12/2022	1202	0	•	
Attendance	01/01/2023	1901	U	U	ENI
Attendance	01/02/2023	2732	0	0	ENT
Attendance	01/03/2023	2630	0	0	ENT
Attendance	01/04/2023	2990	0	0	ENT
Attendance	01/05/2023	1052	0	0	FNT
Attondance	01/05/2023	1652	0	0	ENT
Attendance	01/00/2023	1555	0	0	ENI
Attendance	01/07/2023	1435	0	0	ENT
Admissions	01/04/2022	1269	0	0	Cardiology
Admissions	01/05/2022	2514	0	0	Cardiology
Admissions	01/06/2022	1087	0	0	Cardiology
Admissions	01/07/2022	1310	0	0	Cardiology
Admissions	01/09/2022	2102	0	0	Cardiology
Admissions	01/08/2022	2105	0	0	Cardiology
Admissions	01/09/2022	1409	0	0	Cardiology
Admissions	01/10/2022	1351	0	0	Cardiology
Admissions	01/11/2022	2584	0	0	Cardiology
Admissions	01/12/2022	1844	0	0	Cardiology
Admissions	01/01/2023	2633	0	0	Cardiology
Admissions	01/02/2023	1616	0	0	Cardiology
Admissions	01/02/2023	1010	0	0	cardiology
Admissions	01/03/2023	2239	0	0	Cardiology
Admissions	01/04/2023	1301	0	0	Cardiology
Admissions	01/05/2023	2010	0	0	Cardiology
Admissions	01/06/2023	2786	0	0	Cardiology
Admissions	01/07/2023	1905	0	0	Cardiology
Admissions	01/04/2022	2966	0	0	ENT SI
Admissions	01/05/2022	2000	0	0	ENT
Aumissions	01/05/2022	2329	0	0	
Admissions	01/06/2022	1/0/	U	U	ENI
Admissions	01/07/2022	2725	0	0	ENT
Admissions	01/08/2022	1765	0	0	ENT
Admissions	01/09/2022	1074	0	0	ENT
Admissions	01/10/2022	2809	0	0	ENT
Admissions	01/11/2022	1621	0	0	FNT
Admission	01/12/2022	1321	0	0	
Admissions	01/12/2022	1209	U	U	ENI
Admissions	01/01/2023	1843	0	0	ENT
Admissions	01/02/2023	2654	0	0	ENT
Admissions	01/03/2023	2564	0	0	ENT
Admissions	01/04/2023	2717	0	0	ENT
Admissions	01/05/2022	1042	0	0	FNT
	01/03/2023	1042	0	0	
Admissions	01/06/2023	1488	U	U	ENT
Admissions	01/07/2023	1326	0	0	ENT
Discharges	01/04/2022	1256	0	0	Cardiology
Discharges	01/05/2022	2487	0	0	Cardiology
Discharges	01/06/2022	1084	0	0	Cardiology
Discharges	01/07/2022	1307	0	0	Cardiology
Discharges	01/07/2022	1307	0	0	Cardiology
Discharges	01/08/2022	2086	U	U	cardiology
Discharges	01/09/2022	1392	0	0	Cardiology



Discharges	01/10/2022	1336	0	0	Cardiology
Discharges	01/11/2022	2537	0	0	Cardiology
Discharges	01/12/2022	1843	0	0	Cardiology
Discharges	01/01/2023	2614	0	0	Cardiology
Discharges	01/02/2023	1613	0	0	Cardiology
Discharges	01/03/2023	2199	0	0	Cardiology
Discharges	01/04/2023	1275	0	0	Cardiology
Discharges	01/05/2023	1978	0	0	Cardiology
Discharges	01/06/2023	2749	0	0	Cardiology
Discharges	01/07/2023	1896	0	0	Cardiology
Discharges	01/04/2022	2937	0	0	ENT
Discharges	01/05/2022	2321	0	0	ENT
Discharges	01/06/2022	1701	0	0	ENT
Discharges	01/07/2022	2721	0	0	ENT
Discharges	01/08/2022	1740	0	0	ENT
Discharges	01/09/2022	1065	0	0	ENT
Discharges	01/10/2022	2766	0	0	ENT
Discharges	01/11/2022	1599	0	0	ENT
Discharges	01/12/2022	1208	0	0	ENT
Discharges	01/01/2023	1816	0	0	ENT
Discharges	01/02/2023	2608	0	0	ENT
Discharges	01/03/2023	2546	0	0	ENT
Discharges	01/04/2023	2695	0	0	ENT
Discharges	01/05/2023	1033	0	0	ENT
Discharges	01/06/2023	1475	0	0	ENT
Discharges	01/07/2023	1316	0	0	ENT
Discharge Rate	01/04/2022	1268	1269	0	Cardiology
Discharge Rate	01/05/2022	2471	2514	0	Cardiology
Discharge Rate	01/06/2022	1085	1087	0	Cardiology
Discharge Rate	01/07/2022	1289	1310	0	Cardiology
Discharge Rate	01/08/2022	2076	2103	0	Cardiology
Discharge Rate	01/09/2022	1402	1409	0	Cardiology
Discharge Rate	01/10/2022	1335	1351	0	Cardiology
Discharge Rate	01/11/2022	2563	2584	0	Cardiology
Discharge Rate	01/12/2022	1828	1844	0	Cardiology
Discharge Rate	01/01/2023	2622	2633	0	Cardiology
Discharge Rate	01/02/2023	1602	1616	0	Cardiology
Discharge Rate	01/03/2023	2225	2239	0	Cardiology
Discharge Rate	01/04/2023	1290	1301	0	Cardiology
Discharge Rate	01/05/2023	1992	2010	0	Cardiology
Discharge Rate	01/06/2023	2740	2786	0	Cardiology
Discharge Rate	01/07/2023	1871	1905	0	Cardiology
Discharge Rate	01/04/2022	2914	2966	0	ENT
Discharge Rate	01/05/2022	2302	2329	0	ENT
Discharge Rate	01/06/2022	1705	1707	0	ENT
Discharge Rate	01/07/2022	2683	2725	0	ENT
Discharge Rate	01/08/2022	1761	1765	0	ENT
Discharge Rate	01/09/2022	1053	1074	0	ENT
Discharge Rate	01/10/2022	2790	2809	0	ENT
Discharge Rate	01/11/2022	1604	1621	0	ENT
Discharge Rate	01/12/2022	1206	1209	0	ENT
Discharge Rate	01/01/2023	1820	1843	0	ENT
Discharge Rate	01/02/2023	2606	2654	0	ENT
Discharge Rate	01/03/2023	2514	2564	0	ENT
Discharge Rate	01/04/2023	2704	2717	0	ENT
Discharge Rate	01/05/2023	1023	1042	0	ENT
Discharge Rate	01/06/2023	1472	1488	0	ENT
Discharge Rate	01/07/2023	1304	1326	0	ENT

Support for EasySPC

If you have any other questions, please contact our support team via the EasySPC Hub.

https://bcn.co.uk/data-and-ai/easyspc/hub#easyspc-support